



**CALIFORNIA
HIGH-SPEED RAIL
AUTHORITY**

DATE: **BRIEFING: JULY 30, 2010**

TO: **Chairman Pringle and Executive Administrative Committee Members**

FROM: **Roelof van Ark, Chief Executive Officer**

RE: **Federal HSIPR Funding Application for 2010.**

Discussion:

On Monday, June 28, the U.S. Department of Transportation announced application guidelines for an available \$2.3 billion in funding for the development of high-speed and intercity rail. The announcement included a deadline of August 6 to submit applications to the Federal Railroad Administration.

The Authority and its consultants are working towards various alternatives relating to these new funding applications. Not all costing exercises have been completed, and this paper informs the Committee of the status of such work, and requests guidance and approval from the Committee, so this work may continue with in this manner with Committee input.

Eligibility of Applications:

The FRA has been very supportive in assisting applicants to understand the rules of the new round of applications. The most important conditions to consider are:

- Projects that have received HSIPR program funding under previous solicitations, e.g., ARRA Track 2 grants, are not eligible for new funding (the identical projects cannot be re-submitted).
- Projects funded with ARRA Track 2 funds must retain “operational independence” as defined in Sec. 3.5.2 of the Notice of Funding Availability (NOFA), without considering any new funds.
- As CHSRA was awarded only approx 50% of their original ARRA application value, the FRA requires clarity on how this funding would be applied in case of award, to meet the “operational independence” criteria. Therefore, the Authority must refine or redefine the scope of each of these projects, describe how operational utility would be achieved, and re-define what the measurable benefits would be of each.
- Projects funded with the new HSIPR funds must have independent utility (if new projects are submitted), however new funding can be applied to ARRA funded projects, as long as the combined project meets the “operational utility” criteria, and the new funding should enhance the utility and/or benefits of the original ARRA funded project.
- Due to funding constraints potentially one ARRA-eligible project/section and one additional next-round grant scope could ultimately be funded. The FRA would prefer the Authority to prioritize the sections, however if this is not possible, various sections may be submitted.
- The redefined ARRA-eligible project/sections remain subject to the schedule constraints (NOD/ROD by Sept 2011). The FY10 HSIPR applications for the enhancements of the ARRA

corridors are not subject to the ARRA timelines; however the use of these funds is contingent on the completion of the NOD/ROD for the ARRA sections being on schedule.

- The Federal share of new funding cannot exceed 80 percent; however, > 20% matching by the applicant will be considered in evaluating the merit of its application.

Value of ARRA funding and Bond match available:

In January 2010 the Authority received an ARRA award of \$2.25B. Of that award \$400M has been allocated by USDOT to the Transbay Transit Center. Additionally, \$194M of the ARRA funds has been allocated for the completion of the PE/NEPA activities for Phase 1 of the HST. Hence the remaining funds available for the final design and construction will be **\$1.656B** and when matched with Prop 1 Bond funds the total is:

\$3.312B

FRA Grant Application Approach:

In consultation with the FRA it was recommended that this new round of applications include the following elements:

1. An assessment of the original ARRA grant scope,
2. Needed refinements and re-scoping to optimize use of the \$3.312B available funding and simultaneously meet the “independent utility” criteria
3. Determination of potential additional scope that would complement or enhance the ARRA Track 2 section scope and help advance the CHSTP.

Section Applications:

The alignments are not prioritized in any manner, however as the Merced / Fresno and Fresno / Bakersfield alignments have some commonality and overlap, they are addressed in sequence. In all instances a typical alignment has been used for costing reasons; however this should not be construed as a preference for one alignment over another, but rather is needed for estimating costs. The described alignments are representative of the options being considered in project EIR/EIS documents, and are not to be construed as prejudging the outcome of those environmental processes. .

A. Merced-Fresno Section:

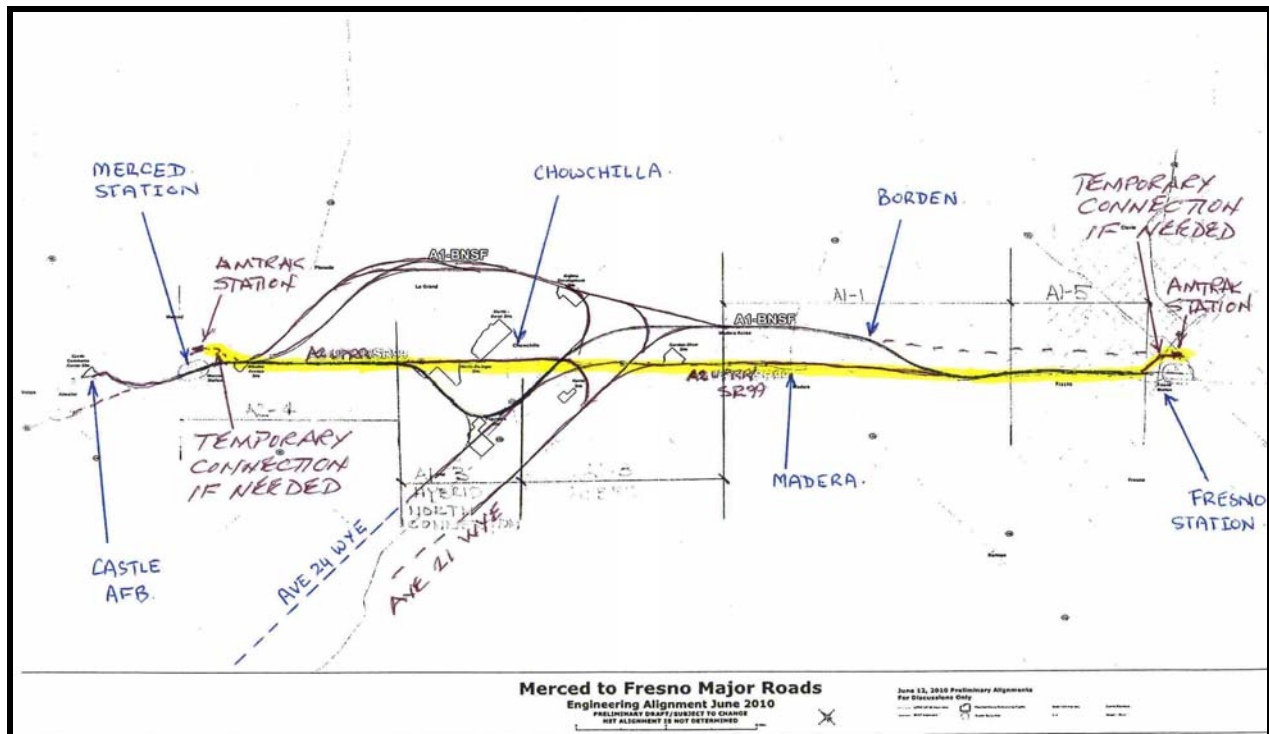


Figure 1

1. Original ARRA grant scope (Figure 1):

- Rural HST civil infrastructure including track from approx. 3 miles south of Merced to approximately 3 miles north of Fresno with interconnection to the existing BNSF track, thus allowing operation from the Amtrak stations in Merced to the Amtrak station in Fresno.
- Amtrak's San Joaquin service would meet "operational utility" requirement, but requires signaling.

2. Refinements and re-scoping of ARRA section needed:

- For the \$3.312B available the Authority recommends to construct:
 - As interconnection with BNSF is required, the best (optimal) position to do this is north of Merced at Castle AFB. The alignment will continue through Merced west of Chowchilla for 39 miles to Road 26/Ave 18 ½ in Madera, where the line will re-connect to the BNSF existing network (Figure 2).
 - A signaling system is required and could be added within the given budget.
- Amtrak's San Joaquin service meets FRA's funding criteria and "independent utility"

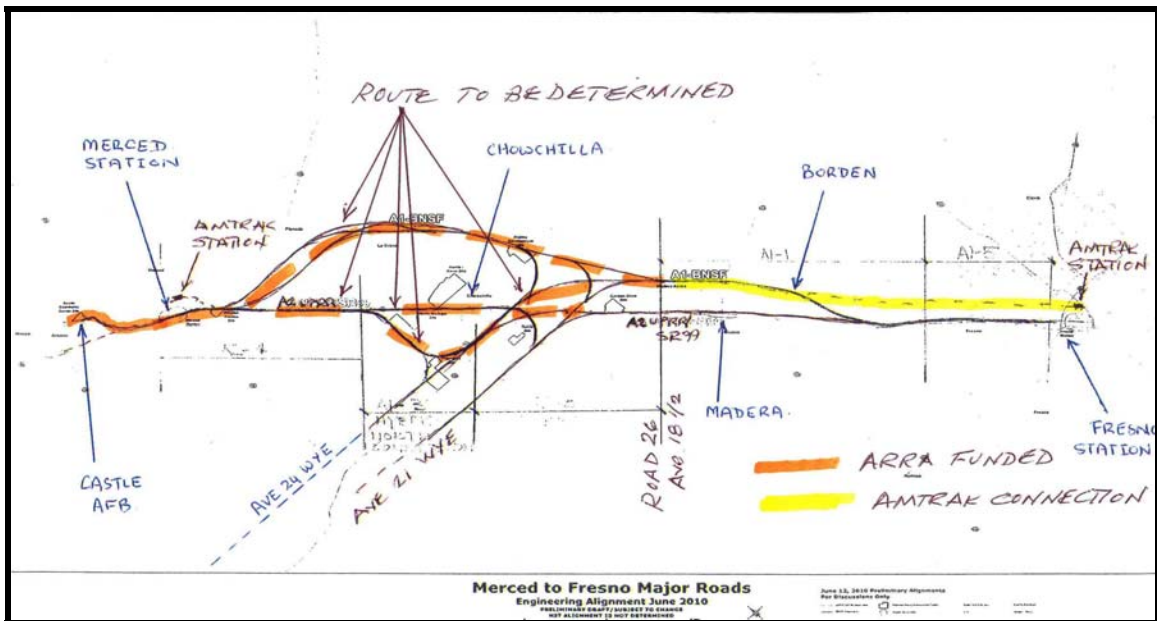


Figure 2

3. New Grant Application:

- Civil infrastructure including track and signaling, from Road 26/Ave 18 ½ in Madera, to be extended as far south as possible (probably to W. Clinton Ave, just north of Fresno being 22 miles) connecting to the existing BNSF line to feed into the existing Amtrak station in Fresno. Thus the ARRA funded plus New funded alignment would be 61 miles in length (Figure 3). Amtrak's San Joaquin's would offer "independent utility" coming from the Amtrak station in Merced on the new track past the WYE, to the Amtrak station in Fresno.

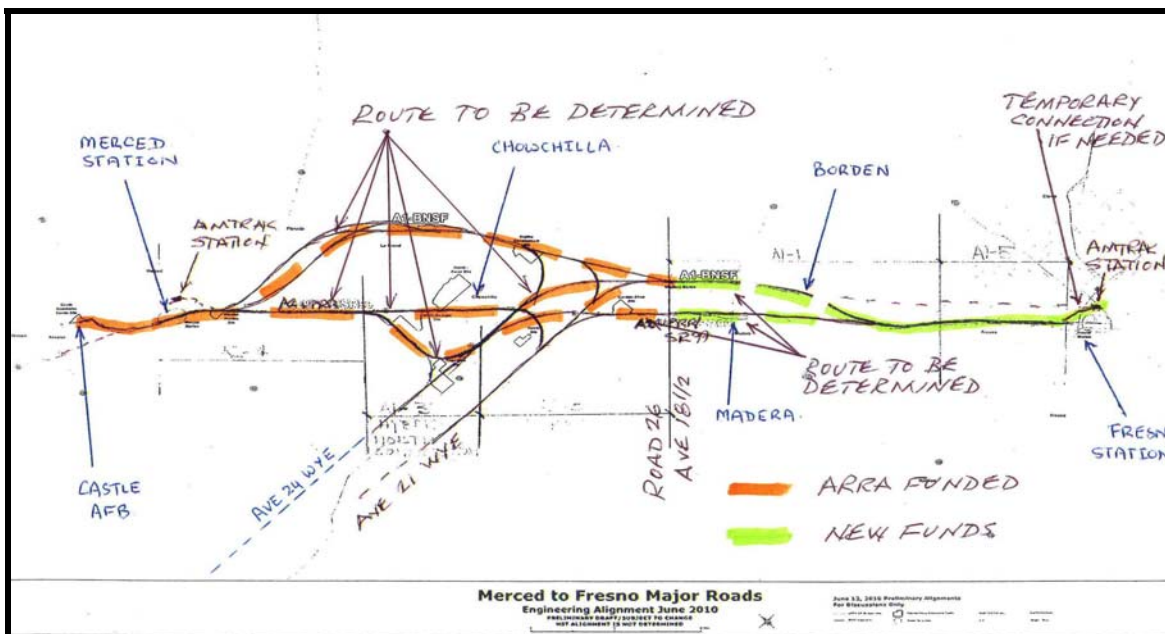


Figure 3

B. Fresno-Bakersfield Section:

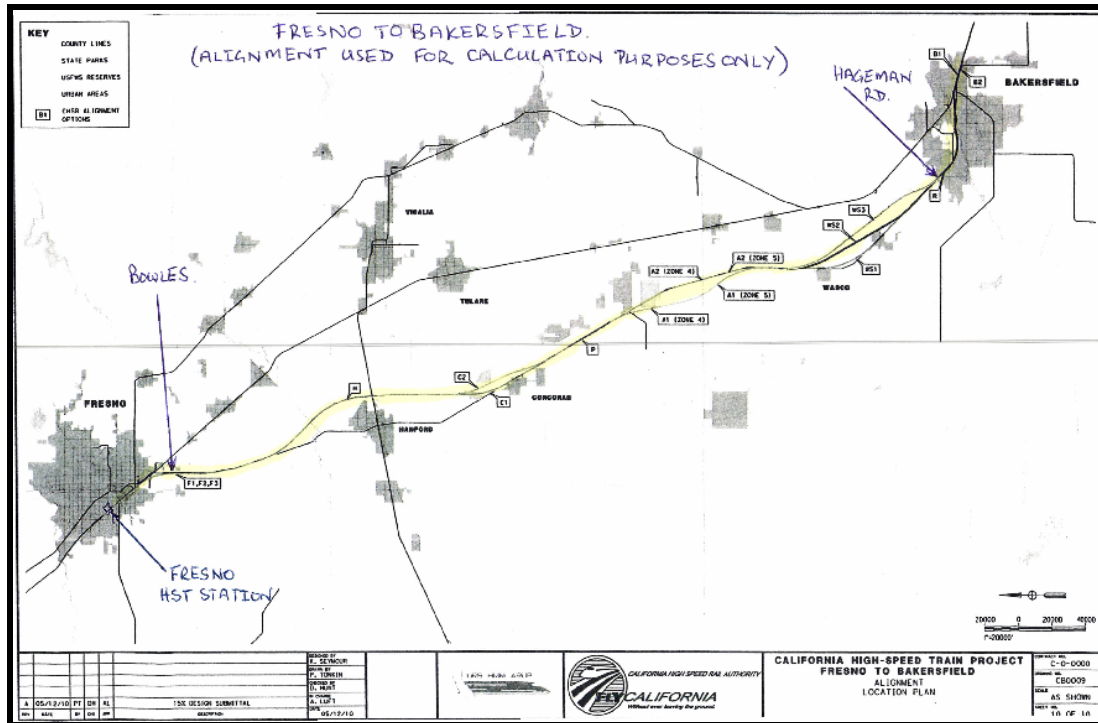


Figure 4

1. Original ARRA grant scope (Figure 4):

- Rural HST civil infrastructure including track from Bowles (8 miles south of Fresno) to Hageman Road BNSF connection just north of Bakersfield, including the connections to the existing BNSF track thus allowing operations from Amtrak station in Fresno to Amtrak station in Bakersfield.
- Amtrak's San Joaquin service would meet "operational utility" requirement, but requires signaling.

2. Refinements and re-scoping of ARRA section needed:

- For the \$3.312B available the Authority recommends to construct (Figure 5):
 - Civil infrastructure including track from just north of Wasco northwards through Fresno to W. Clinton Ave which is about 2 miles north of Fresno (approx 100 miles of completed alignment).
 - The new HSR station in Fresno (including tracks into and out of the station).
 - A signaling system (PTC or ERTMS) as required for independent utility.
 - Interconnectors to the BNSF lines just north of Wasco and at W. Clinton Ave, north of Fresno, to ensure "independent utility".
- Amtrak's San Joaquin service operating on this line will meet FRA's funding criteria and "independent utility"

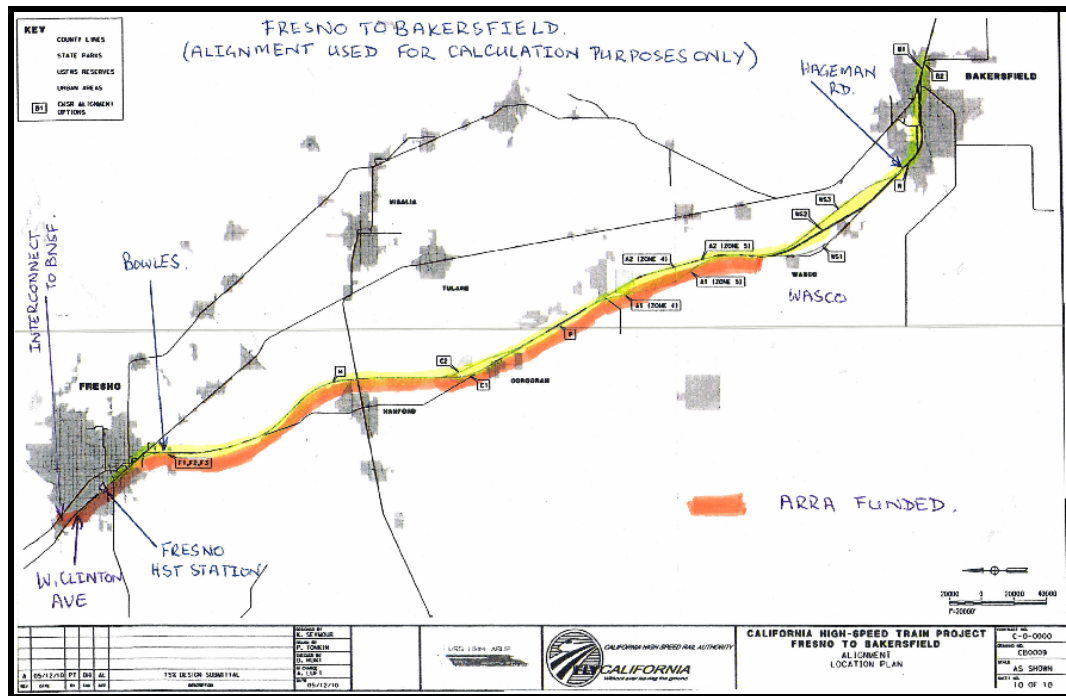


Figure 5

3. New Grant Application:

- Continue the civil infrastructure including new track and signaling north for 16.6 miles from W. Clinton Ave to Borden, continuing a further 5.6 miles on to intersection of Road 26 / Ave 18 ½ (Figure 6)
- Civil infrastructure including new track and signaling, from north of Wasco in a southerly direction to Hagerman Road just north of Bakersfield (Figure 7).
- Interconnectors to the BNSF lines at Borden and Hagerman Road.
- In the interim Amtrak San Joaquin's would offer "independent utility" coming from Merced on the existing BNSF tracks, and connecting to the new alignment at intersection Road 26 / Ave 18 ½ . Thus the ARRA funded plus New funded alignment would be approx 127 miles in length and leads to a practical interface with the WYE which would (as part of Phase 1) finally connect in a westerly direction with San Jose.

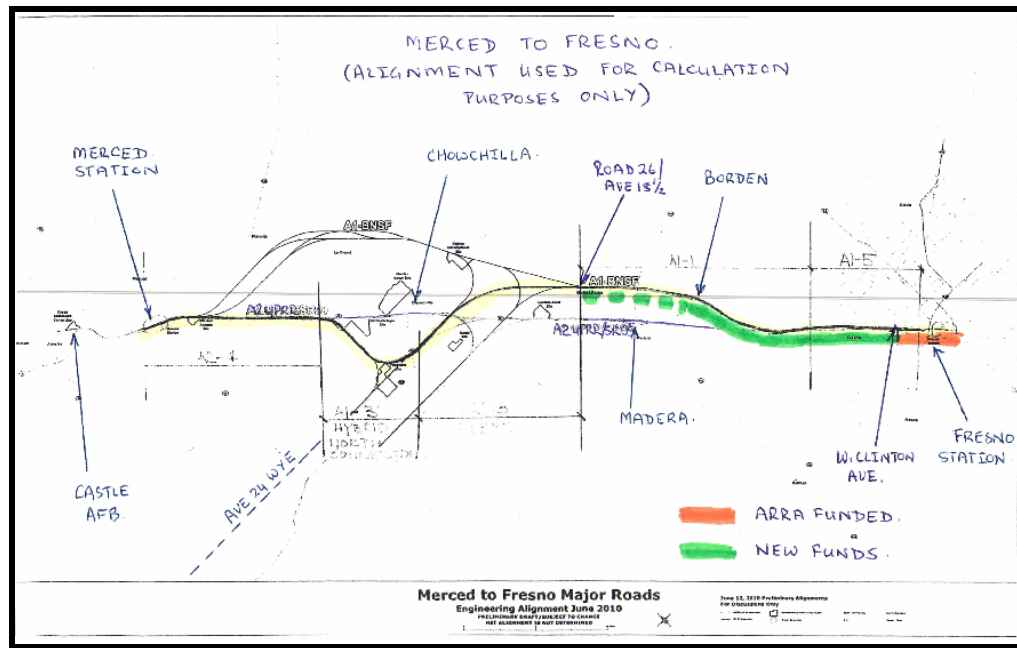


Figure 6

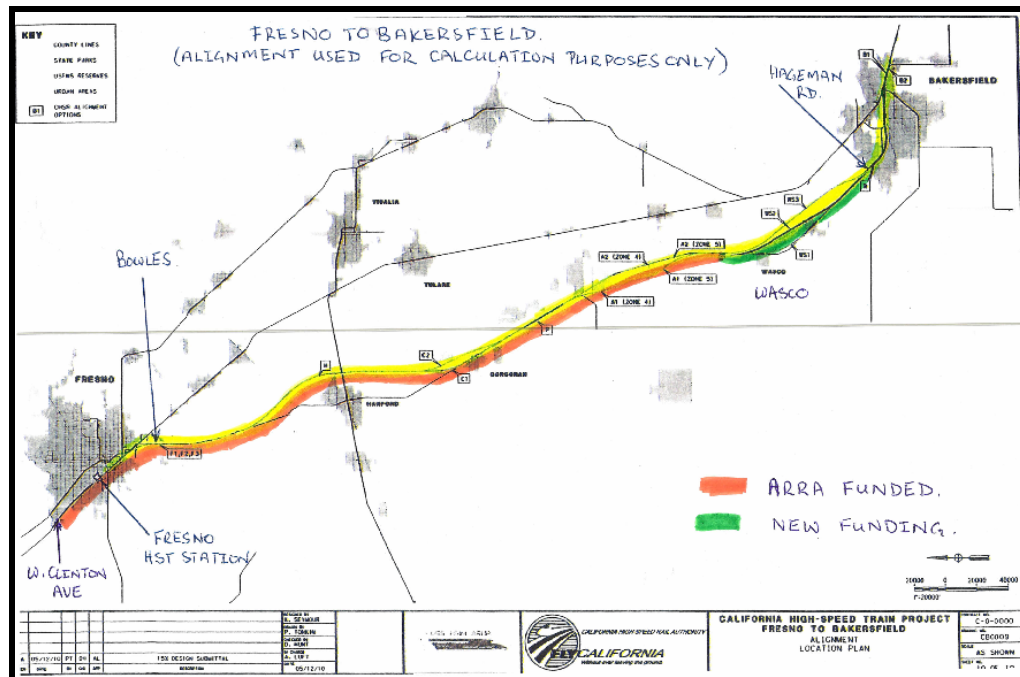


Figure 7

C. Los Angeles–Anaheim Section:

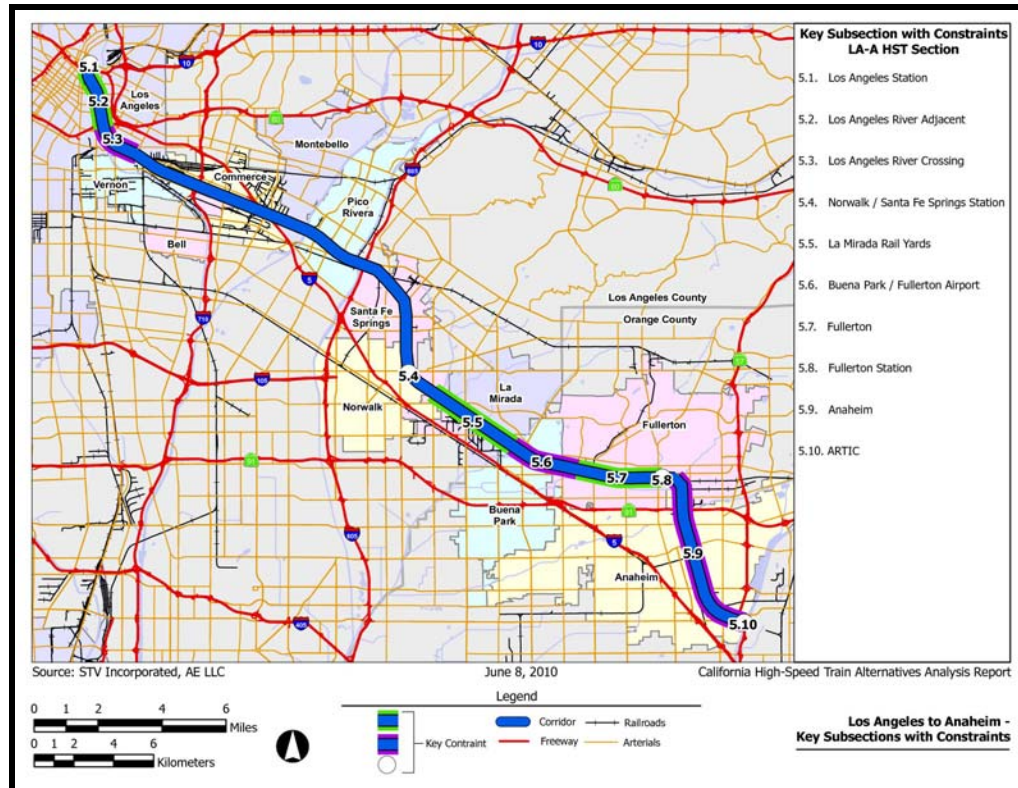


Figure 8

1. Original ARRA grant scope (Figure 8):

- HST civil infrastructure including track from LA to Anaheim based on the Dedicated Track Alternative (applied for \$4.375B (\$YOE) for the section including \$556M for stations)
- Amtrak *Surfliner* service would meet “operational utility” requirement, but requires signaling.

2. Refinements and re-scoping of ARRA section needed:

- The total \$3.312B will not suffice to build the complete segment as requested in the ARRA application.
- The re-defined scope will focus on infrastructure improvements common to both alternatives (Dedicated and Shared-Track Alternatives), to the extent possible, and particularly those with the biggest near-term benefits to intercity passenger service, and will stretch from east of the LA River to La Mirada, namely (Figure 9):
 - Two additional tracks in La Mirada and Santa Fe Springs (Approx. Orange County Line to Norwalk/SFS station) to provide separation between passenger operations and freight operations in La Mirada Yard Area
 - Rosecrans/Marquardt Grade Separation – A high-priority project that improves safety and is needed under all scenarios
 - San Gabriel River Area aerial structure/grade separation (Approx. Los Nietos Rd to Serapis Ave) - Removes two at-grade rail-rail crossings and three at-grade rail-road crossings.

- Commerce/Vernon aerial structure (Approx. I-5 to LA River) - Removes all interactions between freight and passenger operators in Hobart Yard area
- A station at Norwalk (although Fullerton remains an optional site).
- A signaling/PTC system is required and will be added.
- The aforementioned work would cover approximately 50% of the alignment work which would finally need to be done on this corridor (excluding Los Angeles Union Station and ARTIC Station and electrification). It would result in 2 new tracks for HS and shared passenger service, in addition to the existing BNSF freight/shared tracks. This 2 track alignment will be available from just east of the LA River to La Mirada (about 15 miles).
- It should be possible to meet the “operational utility” criteria using Amtrak *Surfliner* service with the correct phased implementation including signaling.

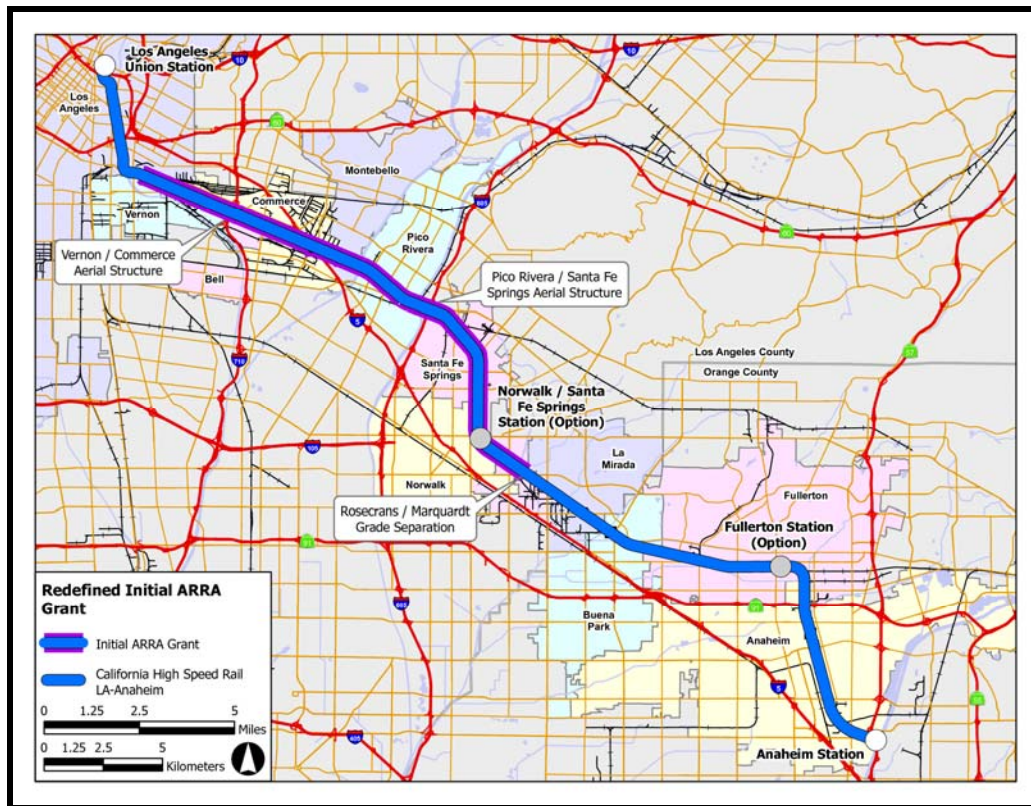


Figure 9

3. New Grant Application:

- Continue with the civil infrastructure and track work not completed with the ARRA funding.
- The New funds should allow all such civil infrastructure and track works to be completed to the west side of the LA River (including Redondo Flyover) up to and including Fullerton. (Figure 10) bringing the total available 2 track system to about 28 miles.
- The application will need to be split into “shared track” and “dedicated track” alternatives, as the designs may differ for this additional work.
- Quad gates along the Fullerton to Anaheim alignment.

- Amtrak *Surfliner* service would meet “operational utility” requirement, at the after ARRA and new funds have been allocated.

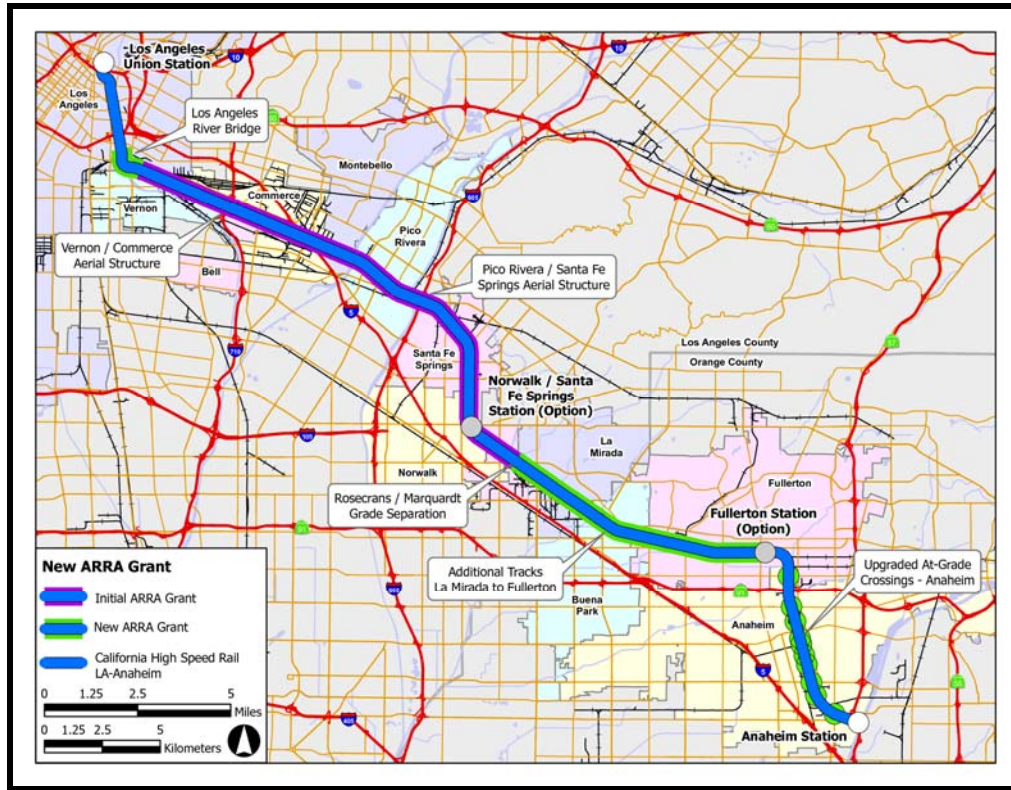


Figure 10

D. San Francisco to San Jose Section:

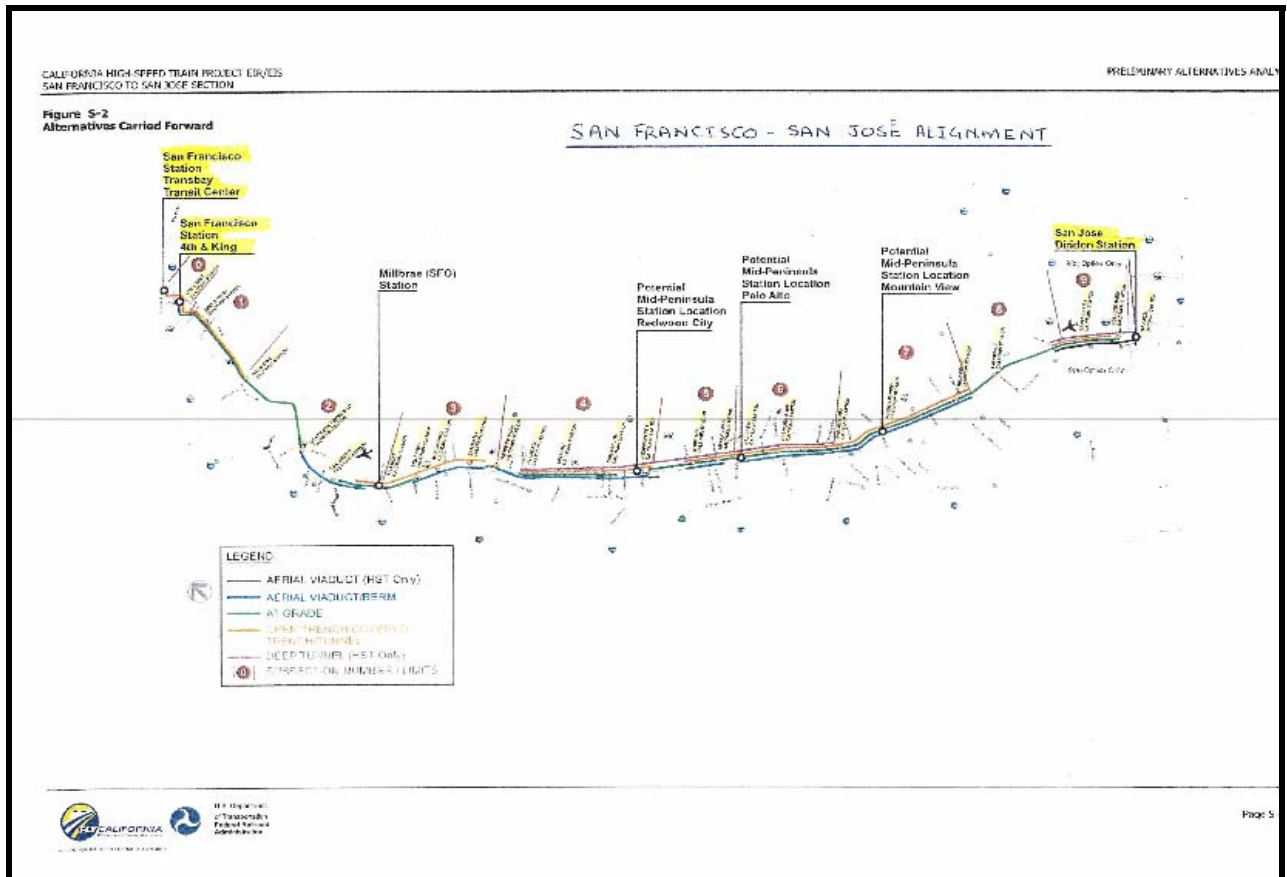


Figure 11

1. Original ARRA grant scope (Figure 11) :

- Applied for \$1.960B; mainly for Electrification (\$740M), PTC & Communication (\$213M), Station improvements (\$391M) and some grade separations.
- Caltrain would meet “operational utility” requirement, however according to the FRA the infrastructural improvements do not meet the funding criteria to ensure “a minimal operating segment of new or substantially improved high-speed or intercity passenger rail service”.

2. Refinements and re-scoping of ARRA section needed:

- The total \$3.312B will not suffice to build the complete segment. Program developments have further increased the costs of certain alternatives which remain applicable.
- The re-defined scope will focus on infrastructure improvements and grade-separation work starting at the 4th & King Station working south, to define work elements having near-term operational benefits to existing rail passenger train service on the Peninsula and meeting the long-term needs of the CHST Program (using the “building block” approach)
- Infrastructure and 4 tracks from 4th & King Station moving south to Redwood Junction could be achieved, based on the less expensive Aerial Structure (as opposed to the Trench solution in some areas such as Burlingame, San Mateo)*¹ (Figure 11).
- Existing 2 tracks will be shared in sections south of Redwood Junction to Mountain View.

¹ If the trench solution is selected then less infrastructure could be implemented.

- Infrastructure and 4 tracks from Mountain View south to north of Fair Oaks Avenue, Santa Clara, based on the less expensive Aerial Structure (as opposed to the Trench solution in some areas such as Mountain View and Sunnyvale) leading into the existing Caltrain system and into Diridon Station
- Include new PTC (possibly CBOSS or ERTMS) to enhance safety and to allow for the vast amount of traffic diversions which will be required during construction, and the 2015 installation deadline.
- Final cut-over must meet “Independent utility” criteria.

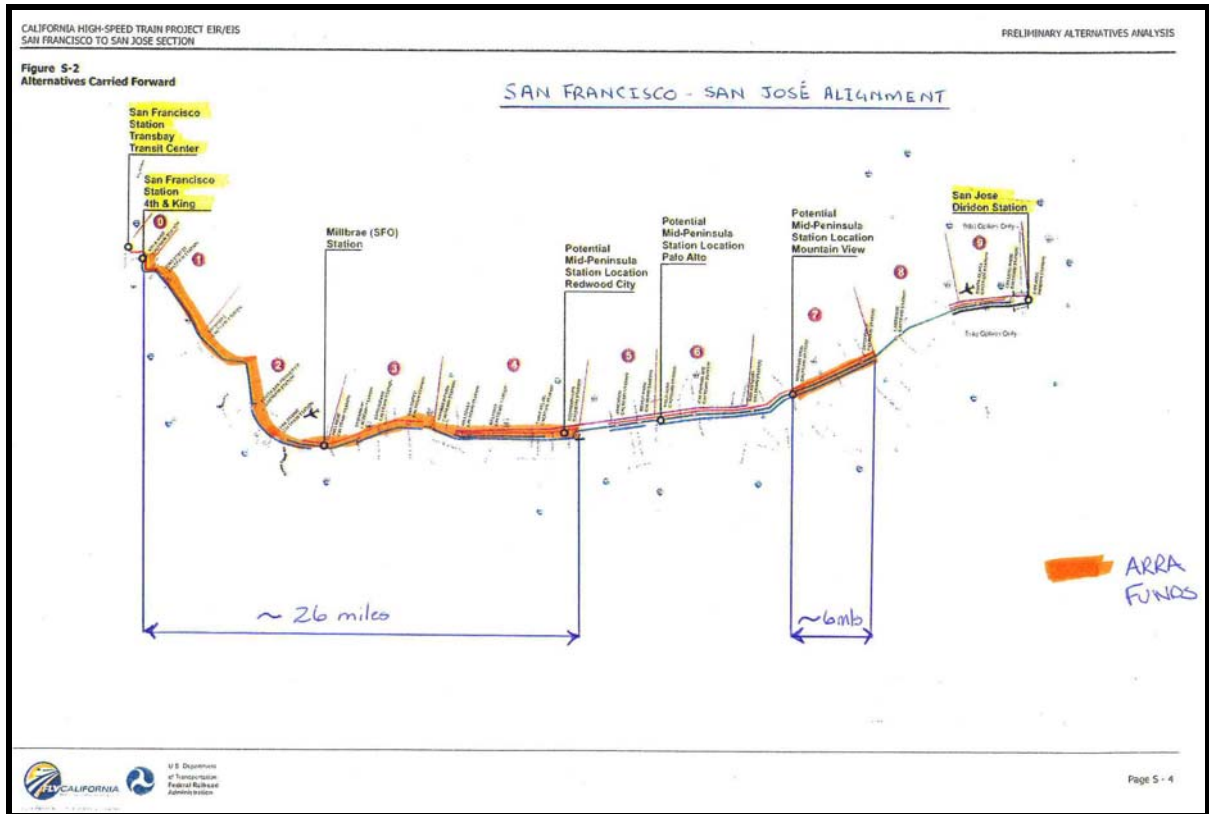


Figure 12

3. New Grant Application:

- Electrification of the alignment, dimensioned for Caltrain and HST whereby 2 tracks only will be electrified in this phase.
- Construction of the Millbrae station and integrating thereof.
- The current estimated cost of this Section (particularly “trench” alternatives) exceeds the amount of potential funding, and thus this section could not be completed with the funds available.
- It is not confirmed that the “operational utility” criteria using the existing Caltrain service including new signaling will meet the FRA requirements, as the service is not deemed to be on an “Intercity” nature, however this will again be submitted as the available solution.

General Comments:

The following general comments are important for the Committee to finally approve the way forward:

- First indications from calculations done show that, to achieve attractive “cut-over” points and to meet the “independent utility” requirements, the Authority would need additional new funding (over and above the ARRA funds) in the magnitude of \$1B to \$1.4B.
- To preserve matching capacity for the future (the FRA will most likely always require at least 20% matching) it is recommended to match with “only” 30% Prop 1A Bond proceeds for this second round. Thus the new funding request would be for between \$700M to \$1B.
- Completing the EIR/EIS and achieving ROD/NOD for the sections proposed is paramount for California to obtain not only the ARRA funds, but also the new 2010 HSIPR funds.

Recommendation:

Staff requests the Executive and Administrative Committee approve the recommended approach taken by staff to apply for the proposed FY10 HSIPR additional funding and that the Committee approve that staff do all further detailed work to meet the submittal deadline of August 6, 2010.

Attachment:

<http://www.fra.dot.gov/downloads/PubAffairs/2010-15992.pdf>